

The Architect.

DOVER CASTLE.

(By ALBERT HARTSHORNE.)

'Therfor a castel has the king made at his devys,
That thar never drede assaut of any enemy.'
GROSTESTRE'S *Chateau d'Amour*.



THE very imposing appearance presented by Dover Castle naturally leads the observer to speculate upon the ages and uses to which its numerous walls and towers are appropriated. All conjecture, however, on the subject will receive but unsatisfactory solution, for the buildings being occupied either by troops, or used as storehouses, converted into magazines or prisons, or else rendered serviceable for modern defensive operations, it will be immediately understood that any detailed account of them in their present condition would be alike difficult and impolitic. Indeed, without the assistance of numerous plans and illustrations, it would be impossible to make the various changes that this fortress has undergone, through a long course of centuries, in any way intelligible; and again, it is more than doubtful whether the information afforded would be commensurate with the trouble of its perusal. Under these circumstances it will be our endeavour in reviewing the architecture of Dover Castle to confine our remarks more especially to its early history, and by the help of authentic documents and architectural evidences to throw more light upon those ancient towers and buildings which we observe at the present day. A few general remarks will be sufficient to note the subsequent changes the Castle has undergone, the injuries it has sustained from prisoners, and the havoc and mutilation it has suffered at the hands of the various architects who in their turns have been permitted to disfigure this noble fortress.

THE PHAROS AND CHURCH.

There can be no doubt that the Romans held a favourable position on the eminence where the present Castle stands. Their camp was oval in form and mainly adapted to the nature of the ground; within the entrenchments were the buildings they usually erected, with the uncommon addition in the present instance of a pharos or beacon. This was, in all probability, the very first building raised in England by the Roman conquerors. In constructing the pharos they followed their usual method of laying a certain number of courses of ashlar alternated with two courses of Roman bonding tiles. Finding the Kentish rag too small and shapeless, and no other materials being within easy distance, they laid their foundations upon blocks of calcareous tufa brought from Normandy, to the depth of 7 feet 4 inches; below this they placed a single course of tile, and a stratum of conglomerate, a foot-and-a-half thick, resting upon yellow clay mixed with flints. The rules laid down by Vitruvius were accurately followed, and an analysis of the mortar proves that his precepts in that respect were as carefully adhered to. This building, in its original condition, is said to have resembled the curious lighthouse at Boulogne, attributed to Caligula, and which was destroyed in 1644. The old facing of the walls is almost entirely gone, but on the south side some of the Roman bricks still remain, with grooves and projections to dovetail into each other. One of the original entrances still exists, with the voussours of the arch formed alternately with pieces of travertine and double tiles: it bears a strong resemblance to arches of an aqueduct near Luynes, at Lillebonne, Pompeii, and other places. The Pharos is octagonal without and square within, and the walls are 10 feet thick; in its present state it is 40 feet high, but has had a much later portion imposed upon it, though at the present day this addition may be considered ancient. This was probably the work of Richard de Grey, Constable of the Castle in the beginning of the fourteenth century, whose arms appear upon a small square stone; but it was again altered at a later time by William de Clinton, Earl of Huntingdon, and constable. The Pharos is called the tower of Julius Cæsar in documents of 15 Edward I. (1287), and appears at that time to have been used as a bell-tower; and in the following reign repairs of the great bell 'in turri Cæsar' are mentioned. In the beginning of the last century 'a pleasing peal of bells' was removed from hence to Portsmouth, since which time it has been suffered to go to ruins.

Whatever other buildings there were of the Roman age exist no longer, but in their stead we find a church of the late Saxon period, cruciform in plan, with a central tower, and built irregularly, like Brixworth, in great part of Roman brick, or as Leland calls them, 'great Briton brykes,' and in imitation of Roman architecture. The brickwork is mixed with flints and Kentish rag, and this gives the building an air of antiquity that is very likely to mislead superficial inquirers, who generally suppose the Pharos and church to be of the same age; the fact is, that at Dover as well as at Brixworth, in the

absence of better materials, the builders availed themselves of those they found on the spot. St. Mary's Church has the distinctive Saxon features of doorways with straight jambs, windows splayed equally inside and out, and arches with the narrow brick pilasters carried round them. It may, however, be questioned whether the transepts are not of considerably later date than the body of the church; the Pharos is united to the nave at the west end.

The church was much altered towards the end of the twelfth century, and the character of the Early English work then introduced is extremely good; it bears so marked a resemblance in its details to the work in the chapel of the keep, that they are doubtless both from the same hand, and it is the opinion of a high authority that both are the work of William the Englishman, the second architect of the choir of Canterbury Cathedral. There are also Early English remains of about thirty years later in date, consisting chiefly of a sedilia and piscina in the south-east angle of the nave; and there is an entry on the Clause Rolls in 1223, in which Henry III. orders the church to be repaired at the same time as the castle. These repairs may be distinguished from the Early English of the first period by being worked with the claw-tool instead of the plain chisel. The same difference of tooling may be observed, though in a stronger degree and of an earlier time, at the junction of the old and new work of the choir of Canterbury.

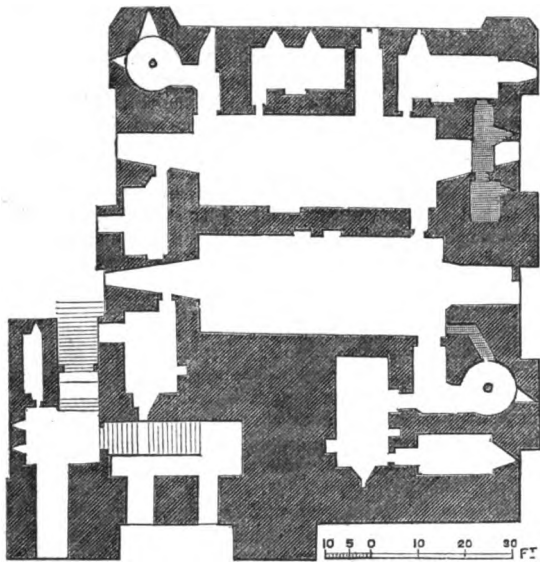
An inventory of the contents of the church was taken in 1343, when it contained the following effects:—A silver cup, a thurible, and divers vestments, two missals, one pontifical, one antiphonal, one book of the legends of the saints, one gradual with a troper, two psalters, two trovers (or collections of versicles to be sung at festivals), one processional, a silver feretory covered with relics, a copper candlestick, gilt, three iron candelabra, an iron pole for supporting the wax lights, one copper crucifix on a staff, silver spoons and fiols, and a picture of the Holy Trinity. To these may be added, from an inventory of 1361, an ivory bust of our Saviour, and a large quantity of costly vestments of all kinds. St. Mary's church appears to have been dismantled early in the last century, and has since been turned into a coal dépôt for the use of the castle. In 1860 it was entrusted by the Government to Mr. Scott for restoration, and the difficult task of restoring a church reduced almost to ruin has been well performed. The excavations inside revealed two ancient floor levels, the Early English, and below it the original Saxon. This latter, under the central tower, consisted of blocks of chalk of about six inches thick, laid upon concrete. Among the many architectural fragments discovered during the repairs were several of the Early English vaulting ribs, which were found to be portions of Saxon balusters, one side of which retained their original form at the back of the Early English mouldings.

THE CASTLE.

In considering the protection of Dover Castle at the Saxon period, we have now nothing definite left to guide us beyond the earthworks which marked the defence of the fortress at that time. The Castle appears to have been comprised within the oval of the Roman earthworks in the vicinity of the Pharos and church, and the buildings probably extended towards the west. At the present day, however, there exist no traces of any Roman or Saxon architecture in connection with those earthworks, and it will therefore be irrelevant to speculate much upon them; in all probability they were not very extensive architecturally, or some fragments at least would have remained to the present day incorporated into later work. But it is evident that there was a stronghold of some kind here when the Conqueror marched against the place immediately after his first battle, for it is recorded that it was burnt by his followers. It may fairly be assumed that William availed himself of this important position, and that either he or his immediate successors re-erected some sort of fortress, for we have mention, on the Great Roll of the Pipe in 1160, of the Castle being victualled with corn, salt, bacon, and cheese, besides notices of repairs and additions to other buildings then in existence.

A great architectural movement took place throughout the whole of England during the reigns of Stephen and Henry II. The number of castles erected from the time of the Conqueror to before the death of Stephen is said to have amounted to eleven hundred and fifteen; but their increasing power gradually made them distasteful to the sovereign, many of the later erections were razed before Stephen's death, and on the accession of Henry II. in 1154 many more were destroyed. It was during this period that all the most important Norman keeps were erected. Their type was first introduced by the building of the White Tower by the Conqueror, and this appears, naturally enough, to have been derived in its turn from buildings of a similar kind in Normandy. The castles of Falaise, Chauvigny, Loches, Domfront, and many others not only preceded the construction of our principal English fortresses, but are all built after the same model. The keep at Dover, both from its size (which is 123 feet × 108 feet square), as well as from its imposing situation, may be compared with that at Bamborough, which is the largest in England. Dover keep differs but slightly from the usual plan. It will be seen from the woodcut that, like nearly all Norman keeps, it is quadrangular. It is divided by a wall, and has a staircase entered from a separate tower which reaches to the second storey. The walls are of great thickness, and are pierced with passages, galleries, and chambers on every floor. There is a well, built in the thickness of the

wall, and said to have been 400 feet deep; it terminates in a small chamber on the second floor. There are no architectural decorations in the loops on the two lowest floors, and only just enough in the upper ones to show that they were lighter chambers appropriated to the possessors of the castle. The point in which Dover more particularly differs from other early keeps is in having a highly decorated chapel in the entrance tower. This is a peculiarly valuable example of florid Norman, and we are enabled from it to date, within a year or two, the various ornaments and mouldings peculiar to the style.



The Castle may be generally described as consisting of a central keep within an inner ward or bailey, in which were erected the buildings commonly met with in a large Norman fortress, such as the hall, kitchen, brewhouse, and various offices. These are encircled by a cingulum, or wall of enceinte, strengthened by 'mural towers' projecting inwards, and 'buttress towers' projecting outwards, and gateways; these are further defended by a broad and deep ditch; beyond this is the outer bailey, or base court, of great extent, and comprising the church within its walls; these are again protected by an imposing array of rectangular and circular towers, and by a broad ditch going entirely round them.

We have already shown, from the 'Great Roll of the Pipe,' that the Castle was provisioned and repaired in 1160; payments were subsequently made to a large number of soldiers in the garrison, and minor repairs carried on until 1180, when such extensive works were commenced and continued for seven years that it is evident that nearly the whole of the castle was within this precise period rebuilt. Referring to that venerable series of records which were annually delivered into the Exchequer, we find that in the year 1180 a charge of 165*l.* 13*s.* 4*d.* was allowed for works upon the walls. In 1183, upon various works, 129*l.* 16*s.* 11*d.* In the following year the expenses for the keep amounted to 131*l.* 8*s.* 10*d.*; in 1185 the continued expenses upon the 'turreis' alone were 299*l.* 2*s.* 1*d.*; and in the same year Mauricius the engineer (engeniator), who had probably studied at the works at Canterbury Cathedral, received 7*l.* 19*s.* In 1186 207*l.* 9*s.* were expended upon the keep and cingulum under Mauricius; in 1187, 151*l.* 15*s.* 4*d.* was paid for work on the keep and Castle, at which time it must have been very nearly completed, the building of the keep and walls of enceinte having cost 1,085*l.* 5*s.* 6*d.*, exclusive of the payment made to Mauricius for his plans and supervision. These expenses may be compared with those of the Castle of Orford, built in 1163 at an outlay of 323*l.*, and that of Bogis, 1172-1188, at a cost of 397*l.* 15*s.* 6*d.*, and some idea may thus be formed of the magnitude of the works carried out at Dover in the short space of seven years.

In the first year of Richard an additional outlay of 50*l.* was made upon the works; certain flooring was done in 1196, and in 1198 the walls were further strengthened at a cost of 76*l.* 3*s.*

The Clause Rolls give a few particulars of the works carried on during the reign of John and the provisioning of the castle in 1213 and 1214. These preparations are important, as Philip II. of France was then menacing England with an invasion. It is true that nothing was effected by him at that time, but at the close of the reign the 'Dauphin' captured a great many places in England, and even besieged the castle of Dover. He fruitlessly assaulted it for fifteen weeks, when, owing to the vigorous resistance of Hubert de Burgh, he was forced to raise the siege and leave the kingdom. This will explain why so much was done to further protect this extreme fortress of the English coast during the long reign of Henry III.

On the accession of this monarch in 1216, Hubert de Burgh was ordered to provision the castle; in 1218 he was allowed all the proceeds arising from farms, tallages, scutages, and pleas in the counties of Kent, Norfolk, and Suffolk; these amounted in 1221 to 1,656*l.* 10*s.* 10*d.* and were employed in strengthening and fortifying the castle, Hubert receiving 1,000*l.* a year as constable. From 1223 to 1239 we learn

from the Clause and Liberate Rolls that no less than 2,922*l.* 13*s.* 10*d.* were spent upon works. From the same authentic sources we find that during the reign of Henry III. 750 oaks were brought to the castle chiefly from the forest of Kingswood in Essex, besides joists and rafters and a large quantity of oak trees not enumerated. The names of Hugh de Alberinorte and Nicholas de Andely occur as carpenters; there are also considerable entries for lead and casks of Bordeaux.

Briefly reviewing the architecture of the Castle at this time, it may be said that the keep, with its wall of enceinte, was the work of Henry II. between 1180 and 1187, and that the towers and boundary wall of the outer bailey were erected in the time of Henry III., between 1216 and 1239. Very little was done during the reign of Edward I.: a windmill was built within the precincts in 1295, at a cost of 39*l.* 6*s.* 11*d.*, but no vestige of it now remains, though the full accounts of its weekly cost are still preserved. In the time of Edward III. much was done in the way of repairs, but no special buildings were erected. Among the miscellaneous entries on the Records during the reign of Henry III. the following may be mentioned:—Making the great gate at the going out of the great barbican in 1232; sending 40,000 quarrels and thirty-five balistars to the Castle in 1236; repairing the King's apartments and chapel, damaged by tempests, and putting in new glass windows in 1239; building a new kitchen in 1242; building a house in which the King's engines may be kept; providing pipes for the bellows in the forge, and a cow-hide to mend them; wages of a coppersmith mending the honey casks, and bran for cleaning the King's arms.

The Castle possessed one large engine, which lay, in the time of Edward I., under the wall of the washer-woman's house. It took six men a whole day to remove it from this place into the grange; at the same time another engine was placed there that used to be kept in the church. A new springald (for projecting garroks) was constructed in 1297, and two more engines brought from London. There are charges for masons working eighty round stones for the use of these machines, and for a barrel of grease and pitch and tar purchased for the large engine.

In 1342 there were 900 calketraps in the Castle, and in 1361 in the armoury twelve helmets, three visored bascinets, twelve light helmets, thirty haketons, nineteen chapelles de fer, thirteen plain bascinets, several boxes and barrels of quarrels, gauntlets, breastplates, &c. The wages of soldiers and archers varied from 1*s.* to 3*d.* a day in the time of Henry III., and Adam le Fevre received 4*d.* a day for making cross-bows. The nails used in the works are variously called 'shingelpriq,' 'leadneyl,' 'dorneil,' 'hussem,' and 'priq.'

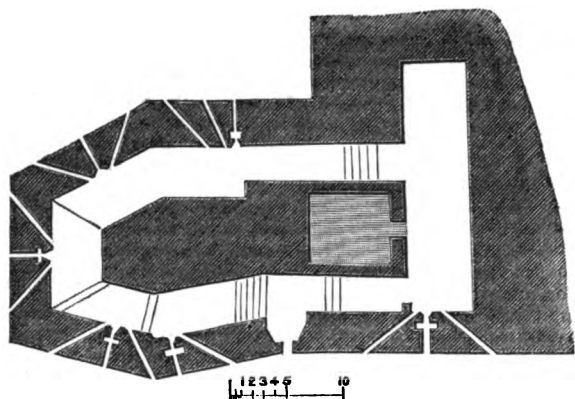
An account of Dover Castle, by William Darell, chaplain to Queen Elizabeth, was published in 1797. It assigns the erection of various towers to particular knights, and further states that they were obliged to defend and repair them, as they held their lands in Kent by virtue of this service. Compressing these assertions into a brief form, we find that John de Fienes granted certain manors to eight knights who were obliged to provide for the defence of the Castle. There is in this account an entire absence of reference to any kind of document, and these military services produced relating to Dover were unknown at the time of the Conqueror, the period to which they are ascribed. We can therefore scarcely accept them as reliable statements: at the same time there is exhibited in Darell's account and Lyons's History a certain amount of circumstantiality which tends to show that they derived their information from some accredited source; but it must bear the same amount of credit that an unauthenticated statement has with reference to an original document. It is only in the instances of the tower called at different times Avranches and Mansellin's that the names upon the records agree with those given by these writers. However, none of the towers now existing were the work of the period when John de Fienes and his 'confederate knights' are said to have flourished, for like themselves, their buildings have passed away.

The most valuable part of Darell's account is the description he gives of the towers and the names they bore in his time. Though many of them are now gone, it would not be impossible at the present day to define their respective sites amidst all the changes and destruction that have taken place.

Among the most remarkable features of the Castle is a spacious and lofty vault, entered by a long flight of steps. It appears, from an entry on the Pipe Rolls, that this was built, in 1229, at a cost of 100*l.*, 'in una volta facienda ad exeundum de castro versus campum.' It was probably used as a large store room in case the castle was besieged. This entry enables us to estimate the date of the contiguous buildings on the north side, including the singular Avranches Tower, to the east, and the remarkably placed tower of St. John, in the middle of the ditch, to the west. The series of souterrains connected with the latter tower renders this the most curious and intricate part of the Castle.

The following are the names of the towers at present in existence:—beginning at the southern extremity of the wall of the outer bailey, we find Rokesley's Tower, Fulbert de Dover's Tower (for some time used as a debtors' prison), Hirst's Tower, Arsic's or Saye's Tower, Gattou's Tower, Peverell, Beauchamp, or Marshal's Tower, an extremely picturesque building, having the gateway set between a square and a circular tower. Passing by Post's, Gostlings or Mary's Tower, we next come to the principal entrance to the Castle, Newgate, Constable's, or Fienes' Tower. This is a very fine and impos-

ing structure, consisting of two circular and embattled Norman towers, with a gateway between them. To those succeed Clopton's, Godsfre's, and the round Crevecoeur towers, with St. John's Tower in the ditch in front. On the east side are Magminot's and Fitzwilliam's towers, and two others beyond them bring us to the angle at which occurs the Avranches or Albrincis Tower. It will be seen from the engraving that this is very picturesque in its outline, and the plan of it deserves study from the curious disposition of the loop holes. They are exceedingly well arranged to meet the requirement necessitated



by the exposed situation of the tower. This is flanked on the east by the Pincer or Veville Tower. Colton's, Chilham's, or Chaldercot's Tower, said to have been rebuilt about 1250, stands between the Pharos and the castle. The names on the accompanying plan will indicate the principal and postern entrances, and the names and positions of the buildings within the inner bailey, as far as they can now be ascertained.

From the time of Edward III. little appears to have been done in the way of additions to the previous buildings. Edward IV. laid out 10,000*l.* on the defences; Henry VIII. also expended money upon fortifications, and Elizabeth and Charles I. upon furniture and repairs, rather than on additions to the fortress. At the end of the sixteenth century frequent applications were made to arrest its further decay and place it in a proper state of defence. In 1642 the Parliamentarians seized the castle and successfully resisted the Royalists, and in 1701 Defoe speaks of it as 'neglected and in decay, and its materials at the mercy of those whose appointments gave them power over it.' The present condition of the castle sufficiently indicates the treatment it has undergone from that time to the present day. The annexed general views—the one taken in 1735 and the other a few years ago—show its bold and imposing position, while the drawing of the inner bailey and keep gives an idea of the simple and massive style of the architecture. It will be unnecessary in the present pages to enumerate the frequent visits Dover Castle has received from royalty and the many important events which have been concluded within its walls. It will ever be associated with the most stirring period of English history, and cannot fail to arrest the contemplation as one of the noblest of England's ancient bulwarks.

For the hitherto unpublished extracts from Records, the author is indebted to notes left by the late Reverend C. H. Hartshorne.

OUR RAMBLER AT THE REVIEW.

OF the many thousand inhabitants of London and the other southern cities and towns whom the shrill notes of the bugle, or the authoritative tap of the drum, will awaken from their morning slumbers on the day of the great Volunteer Review, there are few indeed who will not feel a glow of pride as they recognise the notes of a citizen band. Let any rosy-cheeked maiden or buxom matron, who may give way to a momentary feeling of annoyance at having her morning slumber broken by this unaccustomed *reveil*, take comfort from the reflection that, but for the patriotic movement, which thus gives signs of its vitality, she would ere this have been scared by far rougher accents. The 'Rambler' has sauntered through other Courts and camps besides those of St. James's and of Aldershot. He has listened to far louder thunders of war than those which will this week wake the echoes of Shakespeare's Cliff, for the reports of cannon loaded with that cruel shell have an angry roar, very different from the courteous sound of a salute. And he is as convinced as it is possible for a moderate man to be with reference to any negative proposition, that the volunteer movement alone has saved England from foul insult. He has seen the sardonic grin with which the great establishment of our independent riflemen was greeted by the captains of our Imperial neighbours. He has heard twelve or fourteen years' since, the programme which was sketched for the erection of a second story on the *Arc de Triomphe* of the *Barrière de l'Étoile*. The obliteration of the Waterloo Banquet, and the blowing up of Waterloo Bridge, by the French army of occupation of London, were looked forward to with much confidence by the Croats of the Second Empire. And, what is more, whatever our English pluck might have effected by way of

vengeance or redress, we could not, so far back as 1850, have prevented the French generals from walking into London, if they had chosen to risk their chance of getting out again.

This is no exaggerated statement. It was a man to whom fear, in the pure sense of the word, was a stranger, who first sounded the alarm. It was the first chief and Captain of the country and of the age who told us that we were, in a military sense, entirely undefended. When, some little time previous to the ridiculous collapse of the Brummagem dynasty, which, if we may believe French evidence, carried the art of electoral corruption to its highest pitch, a difficulty arose as to a certain Pritchard, a danger was incurred which was a question of hours. Our neighbours were seriously angry. We were by no means aware of the real state of their feelings towards us. Councils were held at Paris, the upshot of which was, that, according to all military calculation, the French flag might fly from the dome of St. Paul's within a week of the word being given. And other councils were held in England. Of the first the 'Rambler' can speak only on that authority which forms the common material of contemporary history. Of the second we can speak from personal knowledge. The men responsible for the defence of Great Britain found, to their most disagreeable surprise, that defence was for the time impossible, if a real attack were made. Men were wanting, but that was the least formidable deficiency. If our want of guns had been distinctly known at the Tuileries, even an Orleans prince would have plucked up courage to snatch such easy laurels.

At this moment, thanks to God, to the Duke of Wellington, and to the Volunteers, we have a *matériel* for war of which we have no cause to be ashamed, and we have a wholly or partially trained force of at least 300,000 men, ready to employ that *matériel*. Our shores are safe. Therefore, in expressing the gratitude due to those men who form so valuable a portion of our defensive garrison, we wish to say a word as to the service which the civil art of the builder, the mechanist, and the engineer is able to render to those who profess the art of war, and the benefits which that art may in turn hope to receive.

In the fabrication of that defensive armour which the increased power of our modern guns has rendered more appropriate than granite or than brick for the defence of stationary forts, our manufactures hold a foremost place. The competition for extreme cheapness, and the grasping avarice of many commercial men, was rapidly degrading the character of English iron, which, from being the best, was becoming the worst in the world. The terrible blows struck by the bolts of Whitworth, and by the shells of Armstrong, led us to look for some stronger shield than cheap iron, and the solid steel planking which Messrs. Brown and others now produce is a marvel of mechanical skill. But other nations are at least as ready as our economical ministers to avail themselves of English steel. The Russian Government has lately had the wisdom to pay, to an English engineer, the highest fee ever yet offered in the world. It gives twenty thousand guineas a year to secure the counsel of a man who will tell them how to make the best use of their own national resources,—a man so able, that a Russian Grand Duke thus addressed him:—'We spoke of architecture, and you appeared to be an architect. We spoke of metallurgy, and you showed that you were a chemist—may I ask what you are?'

'Please Your Imperial Highness,' replied the sturdy Englishman, 'I am a blacksmith.'

The Architecture of forts, which is, as we write, undergoing an entire revolution, and the metallic defence of land batteries, have less importance, at this moment, in our eyes, from the consideration that the introduction of the Moncrief gun, and of similar methods of utilizing the hitherto wasted power of recoil, will infallibly complete that revolution. For the frowning and impregnable keep of the Middle Ages will be substituted, before the close of the present century, the very opposite mode of defence. We shall lay safe behind our invisible citadels.

But if trenches below the level of the ground or low mounds of earth replace our modern solid and sullen-looking forts of masonry and brickwork just as these have supplanted the lofty keeps and picturesque battlemented tower of which Dover presents such fine specimens, there is in this no loss to the civil architect or engineer. The more solid yet simple our safeguards, the more freely are civil buildings undertaken—the fewer bricks and stones we mass together in our forts, the more we have remaining to use in our churches and mansions, our viaducts and our stations. The arts of peace flourish best when the fear of war is remote, and on this account, if on no other, we who build owe a deep debt of gratitude to the Volunteer force.

But we wish to look at the subject from another point of view, to which the visit to Dover gives peculiar appropriateness. Here we are in the presence of works venerable for their antiquity, but some of them remarkable also for that peculiar picturesqueness of outline and simple beauty of detail which our modern efforts so seldom approach. If Dover is historic ground it is also artistic, and few can gaze upon its ancient Castle and Church, or visit the fine fragment of extremely early build which now stands as the nave (once the choir) of St. Mary's Church, without feeling that it is not merely the age of these structures to which they owe their charm. It was the hearty, intelligent, earnest feeling with which the work was done which gave it at once the solidity to stand so long and the grace which still clings to it in decay. The early builders wrought more in the spirit of the *Volunteer* than of the *Mercenary*,